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EXAMINER	
HUYNH, KHOA B	

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2416	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,788	TAPIA MORENO ET AL.	
	Examiner	Art Unit	
	KHOA HUYNH	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/21/06*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/21/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to because of the following informalities: the phrase "and/or" is unclear. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 1-11, 26-27** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent (*Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780, 787-88 (1876)*) and recent Federal Circuit decisions, a § 101 process must be tied to another statutory class or transform underlying subject matter to a different state or thing. Neither of these requirements is met by claims 1-11, 26-27.

Claims 1-11, 26-27 recite multiple steps: obtaining, determining, mapping ... There is no apparatus positively recited to accomplish these steps. The transformation requirement is a physical transformation. Data transformation is not considered. Claims 1-11, 26-27 clearly don't have a physical transformation.

4. **Claim 12** is rejected under 35 U.S.C. 101 because: "computer program product" is a "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. "Functional descriptive material" is nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

5. **Claim 13** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase "machine-readable medium" is not defined in the specification. Applicant is reminded that "machine-readable medium" should not include nonstatutory subject matter such as carrier wave or propagated signal. Claims that are broad enough to include nonstatutory subject matter (signals) as well as statutory subject matter (tangible manufactures) are considered to be unpatentable.

6. **Claim 14** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The phrase "carrier wave" is a nonstatutory subject matter. Applicant is reminded that claims should not include nonstatutory subject matter such as carrier wave or propagated signal. Claims that are broad enough to include nonstatutory subject matter (signals) as well as statutory subject matter (tangible manufactures) are considered to be unpatentable.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-2, 5-8, 10-11, 27** are rejected under 35 U.S.C. 102(e) as being anticipated by **Koo, US 2004/0121794**.

9. **For claim 1**. Koo teaches: Method for improved power transmission controlling (***Koo, page 1, paragraph 11****, control transmit power by monitoring SIRs*) in duplex time division cellular systems supporting multislot services (***Koo, page 1, paragraph 5****, TDD system with multiple time slots*), comprising:

obtaining a common target signal quality level (***Koo, page 2, paragraph 21****, common target SIR is obtained*);

and obtaining individual service quality levels each relating to one of several individual time slots (***Koo, fig 2****, CRC check is performed in each block/time slots to obtain individual service quality for each*); wherein said individual time slots are assigned to one composite transport channel (***Koo, fig 2****, individual time slots assigned*

to one TrCH) for a data stream resulting from combining of one or several transport channels (***Koo, page 1****, paragraph 5, CCTrCH is the result of combining several TrCH*)

determining individual target signal quality offset levels each relating to one of said individual time slots on the basis of said individual service quality levels (***Koo, page 2, paragraphs 26-27****, SIR_step_size which is the offset level is determined per block/slot*);

and determining individual target signal quality levels each relating to one of said individual time slots on the basis of said common target signal quality levels (***Koo, page 1, paragraph 5****, WTRU measures individual SIR for all time slots and compare it to a common target SIR*) and said individual target signal quality offset levels levels (***Koo, page 2, paragraphs 26-27****, SIR_step_size which is the offset level is determined per block/slot*) such that transmission power controlling is obtainable, which is adapted to specific interference conditions of each one of said individual time slots (***Koo, page 3, paragraph 3****1, transmission power is control using SIR_step_up and SIR_step_down, which take into account interference conditions of each time slots/block*).

10. **For claim 2**. Koo teaches: Method according to claim 1, comprising determining said individual target signal quality offset levels by mapping said individual service quality levels from a service quantity scale to a signal quantity scale (***Koo, page 2, paragraph 26****, offset level SIR_step_size, which is a signal quantity scale is calculated from BLER which is a service quantity scale*) .

11. **For claim 5**. Koo teaches: Method according to claim 1, wherein said individual service quality levels are bit error ratios (***Koo, page 1, paragraph 11****, individual quality levels are BLER*).

12. **For claim 6**. Koo teaches: Method according to claim 1, wherein said common target signal quality level is adjusted in accordance with a common target service quality level and a common measured service quality level being determined from said data transmitted on said composite transport channel (***Koo, page 4, paragraph 47****, target SIR is adjusted according to target BLER and measured* N_e*, which is the number of CRC errors per TTI for the reference TrCH*) .

13. **For claim 7**. Koo teaches: Method according to claim 1, wherein said common target signal quality level is obtainable from an outer loop power control mechanism (***Koo, page 2, paragraph 21****, outer loop power control process obtains target SIR*).

14. **For claim 8**. Koo teaches: Method according to claim 1, wherein said common target signal quality level is a common target signal to interference ratio (***Koo, page 2, paragraph 20****, target signal quality level is SIR*)

15. **For claim 10**. Koo teaches: Method according to claim 1, wherein said composite transport channel is a coded composite transport channel (***Koo, page 1,***

***paragraph 5**, composite transport channel is CCTrCH/coded composite transport channel*).

16. **For claim 11**. Koo teaches: Method according to claim 1, wherein said time division duplex cellular system is a wideband code division multiple access--time division duplex (WCDMA-TDD) system and particularly a time division synchronous code division multiple access (TD-SCDMA) system (***Koo, page 2, paragraph 18**, W-CDMA utilizing TDD mode, also applicable to TD SCDMA*).

17. **For claim 27**. Koo teaches: Method according to claim 6, wherein said common target signal quality level is obtainable from an outer loop power control mechanism (***Koo, page 2, paragraph 21**, outer loop power control process obtains target SIR*).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

19. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

20. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

21. **Claims 3, 9, 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Koo, 2004/0121794** in view of **Muller, US 6,490,461**.

22. **For claim 3**. Koo teaches: Method according to claim 1, comprising

Koo doesn't teach: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels.

Muller from the same or similar fields of endeavor teaches: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels (***Muller, column 5,***

***lines 5-25**, individual BER are measured and compared with estimated total BER to determine an offset, which is used to modify the target E_b/I_o*)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Muller into Koo, since Koo suggests a technique for using signal quality offset to control transmission power, and Muller suggests the beneficial way of calculating such offset by comparing measured individual BER and estimated total BER to provide more accurate power control (***Muller, column 4, lines 1-8***) in the analogous art of power controlling.

23. **For claim 9**. Koo teaches: Method according to claim 1,

Koo further teaches: said transmission power controlling is capable for issuing transmission power control commands for each time slot (***Koo, page 1, paragraph 5**, power control command is issued for all time slots*), wherein said transmission power controlling is applicable for data communications in … and/or downlink direction (***Koo, page 3, paragraph 36**, power control in downlink direction*)

Koo doesn't teach: wherein said transmission power controlling is applicable for data communications in uplink direction.

Muller from the same or similar fields of endeavor teaches: wherein said transmission power controlling is applicable for data communications in uplink direction (***Muller, column 4, lines 8-13,** uplink direction*)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Muller into Koo, since Koo suggests

a technique for power controlling in downlink direction, and Muller suggests the beneficial use of implementing similar technique in both downlink and uplink direction to provide more accurate power control (***Muller, column 4, lines 1-13***) in the analogous art of power controlling.

24. **For claim 26**. Koo teaches: Method according to claim 2, comprising

Koo doesn't teach: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels.

Muller from the same or similar fields of endeavor teaches: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels (***Muller, column 5, lines 5-25****, individual BER are measured and compared with estimated total BER to determine an offset, which is used to modify the target* E_b/I_o)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Muller into Koo, since Koo suggests a technique for using signal quality offset to control transmission power, and Muller suggests the beneficial way of calculating such offset by comparing measured individual BER and estimated total BER to provide more accurate power control (***Muller, column 4, lines 1-8***) in the analogous art of power controlling.

25. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Koo, 2004/0121794** in view of **Muller, US 6,490,461** as applied to claim 3 above, and further in view of **Pietraski, US 2004/0146023**.

26. **For claim 4**. Koo and Muller teach: Method according to claim 3,

Koo and Muller don't teach: wherein said combined individual service quality level is a function of said individual service quality levels.

Pietraski from the same or similar fields of endeavor teaches: wherein said combined individual service quality level is a function of said individual service quality levels (***Pietraski, page 4, paragraph 64****, estimated combined BER is a function of individual BE*R)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Pietraski into Koo and Muller, since Muller suggests a technique for comparing measured individual BER and estimated total BER, and Pietraski suggests the beneficial way of calculating such total BER from individual BER to provide an enhanced estimation procedures which will conserve transmit power and reduce interference (***Pietraski, page 1, paragraph 12***) in the analogous art of quality estimating.

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27. **Claims 12-16, 18-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Koo, 2004/0121794** in view of **Andersson, US 2005/0085255.**

28. **For claim 12**. Koo teaches: a method for improved transmission power controlling in duplex time division cellular systems supporting multislot service comprising the steps of claim 1.

Koo doesn't teach: Computer program product for executing such method, comprising program code sections for carrying out such steps, when said program is run on a computer, a terminal, a network device, a mobile terminal or a mobile communication enabled terminal.

Andersson from the same or similar fields of endeavor teaches: Computer program product for executing such method, comprising program code sections for carrying out such steps, when said program is run on a computer, a terminal, a network device, a mobile terminal or a mobile communication enabled terminal (***Andersson, page 4, paragraphs 47-48****, computer readable medium store program, run on computer based system*)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Andersson into Koo, since Koo suggests a technique for improving transmission power controlling, and Andersson suggests the beneficial implementation of such technique using computer readable medium to store program which runs on computer based system (***Andersson, page 4, paragraph 46***) to ease the process of implementation and improve compatibility in the analogous art of power controlling.

29. **For claim 13**. Koo teaches: a method for improved transmission power controlling in duplex time division cellular systems supporting multislot service comprising the steps of claim 1,

Koo doesn't teach: Computer program product for executing such method, comprising program code sections stored on a machine-readable medium for carrying out such steps, when said program product is run on a computer, a terminal, a network device, a mobile terminal, or a mobile communication enabled terminal.

Andersson from the same or similar fields of endeavor teaches: Computer program product for executing such method, comprising program code sections stored on a machine-readable medium for carrying out such steps, when said program product is run on a computer, a terminal, a network device, a mobile terminal, or a mobile communication enabled terminal. (***Andersson, page 4, paragraphs 47-48****, computer readable medium store program, run on computer based syste*m)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Andersson into Koo, since Koo suggests a technique for improving transmission power controlling, and Andersson suggests the beneficial implementation of such technique using computer readable medium to store program which runs on computer based system (***Andersson, page 4, paragraph 46***) to ease the process of implementation and improve compatibility in the analogous art of power controlling.

30. **For claim 14**. Koo teaches: the steps of claim 1

Koo doesn't teach: Computer data signal embodied in a carrier wave and representing instructions, which when executed by a processor cause such steps to be carried out.

Andersson from the same or similar fields of endeavor teaches: Computer data signal embodied in a carrier wave and representing instructions, which when executed by a processor cause such steps to be carried out. (***Andersson, page 4, paragraph 47-48****, propagation medium transport program, executed by processor containing system*)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Andersson into Koo, since Koo suggests a technique for improving transmission power controlling, and Andersson suggests the beneficial implementation of such technique using propagation medium to transport program which runs on processor containing system (***Andersson, page 4, paragraph 46***) to ease the process of implementation and improve compatibility in the analogous art of power controlling.

31. **For claim 15**. Koo teaches: Transmission power controller (***Koo, page 2****, **paragraphs 19-20****, WTRU unit contains inner loop power control and outer loop power control****, **page 1, paragraph 11****, control transmit power by monitoring SIRs*) for time division duplex cellular systems supporting multislot services (***Koo, page 1, paragraph 5****, TDD system with multiple time slots*), comprising at least

… obtaining a common target signal quality level (***Koo, page 2, paragraph 21****, common target SIR is obtained*);

… obtaining individual service quality levels each relating to one of several individual time slots (***Koo, fig 2****, CRC check is performed in each block/time slots to obtain individual service quality for each*); wherein said individual time slots are assigned to one composite transport channel (***Koo, fig 2****, individual time slots assigned to one TrCH*) for a data stream resulting from combining of one or several transport channels (***Koo, page 1****, paragraph 5, CCTrCH is the result of combining several TrCH*)

… determining individual target signal quality offset levels each relating to one of said individual time slots on the basis of said individual service quality levels (***Koo, page 2, paragraphs 26-27****, SIR_step_size which is the offset level is determined per block/slot*);

… determining individual target signal quality levels each relating to one of said individual time slots on the basis of said common target signal quality level (***Koo, page 1, paragraph 5****, WTRU measures individual SIR for all time slots and compare it to a common target SIR*) and said individual target signal quality offset levels (***Koo, page 2, paragraphs 26-27****, SIR_step_size which is the offset level is determined per block/slot*) such that said transmission power controller is able specifically adapt transmission power to individual interference conditions of each one of said individual time slots (***Koo, page 3, paragraph 31****, transmission power is control using SIR_step_up and SIR_step_down, which take into account interference conditions of each time slots/block*).

Koo doesn't teach: means for performing the previous steps

Andersson from the same or similar fields of endeavor teaches: means for performing the previous steps (***Andersson, fig 5****, quality measurement/control logic 410, SIR processing 420*)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Andersson into Koo, since Koo suggests steps for improving transmission power controlling, and Andersson suggests the beneficial implementation of such steps using quality measurement/control logic and processing unit (***Andersson, page 4, paragraph 46***) to ease the process of implementation and improve compatibility in the analogous art of power controlling.

32. **For claim 16**. Koo and Andersson teach: Transmission power controller according to claim 15, wherein said means for determining individual target signal quality offset levels comprises means for

Koo further teaches: mapping said individual service quality levels from a service quantity scale to a signal quantity scale (***Koo, page 2, paragraph 26****, offset level SIR_step_size, which is a signal quantity scale is calculated from BLER which is a service quantity scale*).

33. **For claim 18**. Koo and Andersson teach: Transmission power controller according to claim 15, comprising means for

Koo further teaches: adjusting said common target signal quality level in accordance with a common target service quality level and a common measured service quality level being determined from said data transmitted on said composite transport channel (***Koo, page 4, paragraph 47****, target SIR is adjusted according to target BLER and measured N_e, which is the number of CRC errors per TTI for the reference TrCH*).

34. **For claim 19**. Koo and Andersson teach: Transmission power controller according to claim 15, wherein

Koo further teaches: said individual service quality levels are bit error ratios (***Koo, page 1, paragraph 11****, individual quality levels are BLER*).

35. **For claim 20**. Koo and Andersson teach: Transmission power controller according to claim 15, wherein

Koo further teaches: said common target signal quality level is a common target signal to interference ratio (***Koo, page 2, paragraph 20****, target signal quality level is SIR*).

36. **For claim 21**. Koo and Andersson teach: Transmission power controller according to claim 15, comprising

Koo further teaches: outer loop power control mechanism from which said common target signal quality level is obtainable (***Koo, page 2, paragraph 21****, outer loop power control process obtains target SIR*).

37. **For claim 22**. Koo and Andersson teach: Transmission power controller according to claim 15, wherein said transmission power controller is provided for

Koo further teaches: wideband code division multiple access--time division duplex (WCDMA-TDD) systems and particularly for time division synchronous code division multiple access (TD-SCDMA) systems (***Koo, page 2, paragraph 18****, W-CDMA utilizing TDD mode, also applicable to TD SCDMA*).

38. **For claim 23**. Koo and Andersson teach: Cellular terminal (***Koo, page 2, paragraph 19****, WTRU*) capable to operate in a cellular time division duplex system supporting multislot services (***Koo, page 1, paragraph 5****, TDD system with multiple time slots*), comprising at least a transmission power controller for adjusting transmission power control of downlink data transmissions, wherein said transmission power controller is a transmission power controller according to claim 15 (***Koo, page 2, paragraph 20****, inner loop power control and outer loop power control processes*).

39. **For claim 24**. Koo and Andersson teach: Base station (***Koo, page 2, paragraph 19****, base station*) for cellular time division duplex system supporting multislot services (***Koo, page 1, paragraph 5****, TDD system with multiple time slots*), comprising at least a

transmission power controller for adjusting transmission power control of uplink data transmissions, wherein said transmission power controller is a transmission power controller according to claim 15 (***Koo, page 2, paragraph 20****, inner loop power control and outer loop power control processes*).

40. **For claim 25**. Koo and Andersson teach: Radio access network system of a cellular time division duplex system supporting multislot services (***Koo, page 1, paragraph 5****, TDD system with multiple time slots*), wherein said radio access network system comprises at least one base station (***Koo, page 2, paragraph 19****, base station*) and at least on radio network controller (***Koo, page 2, paragraph 19****, site controller*), wherein said radio access network system comprises additionally a transmission power controller for adjusting transmission power control of uplink data transmissions, wherein said transmission power controller is a transmission power controller according to claim 15 (***Koo, page 2, paragraph 20****, inner loop power control and outer loop power control processes*).

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41. **Claims 17, 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Koo, 2004/0121794** in view of **Andersson, US 2005/0085255** as applied to claims 15, 16 above, and further in view of **Muller, US 6,490,461.**

42. **For claim 17**. Koo and Andersson teach: Transmission power controller according to claim 15, comprising means for

Koo and Andersson don't teach: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels.

Muller from the same or similar fields of endeavor teaches: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels (***Muller, column 5, lines 5-25****, individual BER are measured and compared with estimated total BER to determine an offset, which is used to modify the target* E_b/I_o)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Muller into Koo and Andersson, since Koo suggests a technique for using signal quality offset to control transmission power, and Muller suggests the beneficial way of calculating such offset by comparing measured individual BER and estimated total BER to provide more accurate power control (***Muller, column 4, lines 1-8***) in the analogous art of power controlling.

43. **For claim 28**. Koo and Andersson teach: Transmission power controller according to claim 16, comprising means for

Koo and Andersson don't teach: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels.

Muller from the same or similar fields of endeavor teaches: mapping a difference between said individual service quality levels and a combined individual service quality level for determining said individual target signal quality offset levels (***Muller, column 5, lines 5-25****, individual BER are measured and compared with estimated total BER to determine an offset, which is used to modify the target* E_b/I_o)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Muller into Koo and Andersson, since Koo suggests a technique for using signal quality offset to control transmission power, and Muller suggests the beneficial way of calculating such offset by comparing measured individual BER and estimated total BER to provide more accurate power control (***Muller, column 4, lines 1-8***) in the analogous art of power controlling.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHOA HUYNH whose telephone number is (571) 270-7185. The examiner can normally be reached on Monday - Thursday: 7:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SEEMA RAO can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2416

/K. H./
Examiner, Art Unit 2416